Recent "General Interest" Questions

Several of the CAMs have asked very similar questions about the following topics…

- I'll attempt to provide information on these here in a centralized place
- don't hesitate to ask for clarification on any of this

1. Use of Milestones in the Task Lists
2. Requirements for Long-Duration Tasks
3. How we will report on progress
4. Next Steps in Creation of the RLS
   - Links between tasks
   - Entering resources

Milestones in Task Lists

Two types of Milestones will appear in the Task Lists/RLS.

1. Internal Milestones
   - Indicate important events within the deliverable
     - Example: “Internal Milestone: Prototype phase complete”
   - Defined at different levels: System-level, Project-level, Agency-level,...
   - Used for summaries of progress on the deliverable at its appropriate level
     - For inclusion into things like monthly progress reports and review presentations where listing progress on each task is too cumbersome
   - We will work on refining/defining these after tasks are entered into P6. Mark as “Internal Milestone: xxx”
     - Set mainly by agency expectations of project tracking
2. External Milestones
   - Indicate where work on a deliverable depends on something external to that deliverable
     - Example: if you cannot start a slice test without a French timing board being available, then you should include “External Milestone: French timing board available” and make this a parent of the “Slice Test” task
   - Two main reasons for having external milestones
     - Their presence indicates to reviewers that we are aware of external dependencies for our deliverables. This is something that they always spend a lot of time worrying about.
     - Allow a simple way of assessing the consequences of schedule slips for these external items. When the date of the external milestone is changed in P6, the impact on the project schedule and cost is automatically calculated.
   - Make sure that you have the most important external milestones for your deliverable included in your task lists. Mark them as “External Milestone: xxx”

External Dependencies

Two categories of External Dependencies

1. Dependencies on other US Deliverables

- Once we have the actual RLS, these will be captured by links in P6 between tasks in different deliverables.
  - The only reason to put them explicitly into the task lists is so that Winnie and the P6 team see these dependencies easily when they're entering the data into P6
  - Indicate these in the task lists as: “Internal Dependency to 6.x.y.z: <task description>”
    - This should be done on both the “sending” and “receiving” task list of the dependency

2. Dependencies on non-US items

- This is what review committees obsess about. We will need to include a reasonably complete list of the main non-US dependencies explicitly into the P6 RLS.
  - If we do this properly, our review committees will conclude that we are aware of our external dependencies and are managing them well.
  - If external dependencies are unclear to them, then the review will devolve into an endless discussion of what the dependencies are and how reliable our international partners are.
- We wasted a *lot* of review time in Phase-I about this that could have been avoided if we had just produced clear lists of these dependencies from the start.
- Include these in the task lists as an “External Milestone: xxx”

Reporting on Progress

- Both DOE and NSF are requiring us to produce monthly HL-LHC progress reports. These reports have two components
  - Progress on the work scheduled
  - Financial status: funds budgeted, funds spent, etc.
- CAMs will report progress using spreadsheets circulated monthly
  - Examples of these spreadsheets (as we currently see them) are posted on the indico page. The basic information is the %complete of each task
  - The updated %complete information will be entered into the RLS in P6
- Tasks starting 10/1/2016 or later will be entered into P6 for both DOE and NSF
  - It will make monthly tracking of R&D progress easier (both cost and schedule)
  - It will allow us to "practice" running Earned Value on the NSF tasks for several months before the NSF PDR as is likely to be required of us

Long Duration Tasks

- Some questions about requirements for Long Duration tasks came up during the ANL EVMS training last week
  - Clarification from Phase-I Project Office on this issue
- The only actual requirement here is that progress on tasks must be reported using objective measures for which written justification must be provided
  - The BNL EVMS certification (agreed to by DOE) states that we do not need to provide objective measures with justification for tasks with duration < 3 calendar months (~60 working days)
  - For each task with duration > 3 months we would need to provide a detailed document describing and justifying the objective measures that we would use to report on its progress. We do NOT want to do this. Writing a justification and coming up with objective measures will require far more work (from you) than simply breaking up the task.
- Bottom Line: do not produce tasks with durations >3 months in the first two years, and limit tasks to <6 months after that (of course <3 months is still better)
  - Generally: do not set all your task lengths to the maximum allowed. This makes it look to reviewers like we're padding our schedule. Use durations that are as objective as possible.

Next Steps in RLS Creation (I)

- Right now the focus should be on preparing task lists for entry into P6.
  - However, knowing some more information about the next steps can be helpful in understanding what's really needed for the task lists
  - A few more details on what's to come after your tasks are entered into P6 are given below. These will evolve as we learn from the first few deliverables

1. After P6 entry you will get a P6-generated spreadsheet with
   - Task names, IDs, start/end dates, durations, assumed linkages (populated from P6) + labor, material, travel columns (which will be blank since you haven't yet loaded resources)
   - It will be important to check this list task-by-task to make sure that there are no mistakes.
2. The next step will be to get linkages between tasks correct
   - Simple assumptions will be made as to how tasks depend on each other when they are entered into P6. Some of these will be wrong and will need to be changed.
   - The PO will set up meetings with the L2s, CAMs, ICs to go over the spreadsheets line-by-line to make sure that all tasks and linkages are correct.
   - Once all linkages are correct, you'll be able to see the real flow of your project (end date, bottlenecks, etc)

Next Steps in RLS Creation (II)

3. After linkages are settled, you'll start entering resources
   - A web-based tool (the CET), interfaced to P6, will be provided for you to do this task-by-task
     - it's not yet available due to contractual issues. These will be sorted out in the next few days
   - It will ask you to enter (for each task)
     - Labor Tasks: Labor Category (using the same naming scheme that you used when you provided rate information to Chuck) + Hours of effort required for this task
     - Material Tasks: material cost (in FY17$, fully burdened - P6 will do the inflation)
     - Travel Tasks: travel cost (in FY17$, fully burdened)
   - Undoubtedly, when this is finished your total cost and budget profile will be different than you expected. (And we all know in which direction that difference will go !)
4. You will need to iterate with the PO and the Management Team to get to your target budget and profile
5. Then we start worrying about risk (more on this later)

RLS Creation

- As you all know – it is going to take a HUGE amount of work to get this done by the Fall
  - Please factor this into your schedules
- Getting your final task lists to Winnie as soon as possible is the critical first step
  - Please do this ASAP